What Is Claimed Is:

1. A system for stapling tissue comprising:

an operative head including a pair of opposed, curved tissue clamping jaws sized to pass through an esophagus, the jaws being moveable with respect to one another between an open tissue receiving configuration and a closed tissue clamping configuration, a first one of the curved jaws including a stapling mechanism and a second one of the jaws including a staple forming anvil surface, the stapling mechanism including staple slots through which staples are fired arranged in a row extending from a proximal end of the first jaw to a distal end thereof; and

a control handle which, when the operative head is in an operative position within one of a patient's stomach and esophagus, remains outside the patient, the control handle including a first actuator for moving the jaws relative to one another and a second actuator for operating the stapling mechanism.

2. The system according to claim 1, further comprising a tissue cutting mechanism for severing from the patient's body tissue located radially within the row of staples.

3. The system according to claim 1, further comprising a staple pusher mounted for movement within the first jaw along a path substantially parallel to the row of staples.

4. The system according to claim 3, wherein the stapling mechanism fires staples in a plurality of

substantially parallel rows.

5. The system according to claim 3, further comprising a tissue cutting mechanism for severing from the patient's body tissue located radially within the row of staples wherein the tissue cutting mechanism comprises a blade coupled to the staple pusher.

6. The system according to claim 1, wherein the operative head further includes a first jaw moving mechanism for gross adjustment of the position of the jaws relative to one another and a second jaw moving mechanism for fine adjustment of the jaws relative to one another.

7. The system according to claim 6, wherein the second jaw moving mechanism includes a substantially C-shaped clamp received around the first and second jaws.

8. The system according to claim 7, wherein the substantially C-shaped clamp includes a tissue cutting blade integrally formed therewith.

9. The system according to claim 6, wherein the first jaw includes a curved cam slot substantially parallel to the row of staples and wherein the substantially C-shaped clamp includes a cam follower riding within the cam slot.

10. The system according to claim 9, wherein the staple pusher is coupled to the C-shaped clamp for movement therewith.

11. The system according to claim 10, wherein the stapling mechanism includes a plurality of staple driving members, each staple driving member being received within a respective staple slot and wherein the staple pusher

includes an angled surface which, when the staple pusher is driven along the path substantially parallel to the row of staples, the angled surface sequentially contacts the staple pushers to drive the staples out of the first jaw toward the second jaw.

12. The system according to claim 11, wherein the tissue cutting blade is coupled to the C-shaped clamp so that, as the stapling mechanism is operated, it trails the angled surface of the staple pusher so that tissue is cut only after a corresponding radially outer portion of tissue has been staped.

13. The system according to claim 6, wherein the second jaw moving mechanism includes an I-beam member a web of which extends through corresponding slots in the first and second jaws with a first portion of the I-beam member being received within the first jaw and a second portion of the I-beam member being received within the second jaw.

14. The system according to claim 13, wherein the I-beam member serves as the staple pusher and wherein a first portion of the I-beam member includes a camming surface which sequentially contacts each of a plurality of staple pushers as the I-beam member is moved through the corresponding slots in the first and second jaws.

15. The system according to claim 13, wherein the I-beam member includes a tissue cutting blade extending from the web between the first and second portions of the I-beam member.

16. The system according to claim 1, wherein the gross adjustment mechanism includes a cable extending between the control handle and the operative head, wherein the cable

extends around a pivot member coupled to one of the first and second jaws to couple to the other of the first and second jaws.

17. A method for stapling tissue comprising the steps of:

inserting into a patient's mouth a flexible endoscope device including an operative head having a pair of opposed, curved tissue clamping jaws, a first one of the curved jaws including a stapling mechanism and a second one of the jaws including a staple forming anvil surface;

moving the jaws relative to one another from a closed position to an open tissue receiving position;

drawing a folded, full-thickness portion of tissue from one of the patient's stomach and esophagus between the jaws;

moving the jaws from the open position to the closed position to clamp the tissue between staple slots formed in the first jaw through which staples are fired by the stapling mechanism and the staple forming surface, wherein the staple slots are arranged in a row extending from a proximal end of the first jaw to a distal end thereof; and

actuating the stapling mechanism to drive staples out of the staple slots through the tissue and against the staple forming surface to couple the folds of tissue to one another.

18. The method according to claim 17, wherein the

tissue is located in the patient's stomach and the folds of tissue are coupled to one another to reduce a size of an interior space of the stomach.

19. The method according to claim 18, wherein tissue radially within the row of staples is left in place.

20. The method according to claim 17, wherein tissue radially within the row of staples is severed from the stapled tissue.